AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for extending ~~one or more capabilities~~ a capability of a handheld device capable of independent operation, the method comprising:

~~(a) said handheld device~~ detecting a helper device that provides ~~at least one~~ a resource;

~~(b) determining whether said helper device provides a selected one of said at least one resource, said selected one of said at least one resource being selected to extend said one or more capabilities of said handheld device, said handheld device being capable of independent operation and said helper device being configured to control access to the selected resource;~~

~~(c) said handheld device~~ requesting access to the ~~selected~~ resource from ~~said~~ the helper device;

~~(d)~~ transferring data to ~~said~~ the helper device from ~~said~~ the handheld device ~~in accordance with said~~, if the helper device ~~granting said handheld device~~ grants access to the ~~selected~~ resource;

~~(e) said helper device~~ using the ~~selected~~ resource to process the ~~transferred~~ data transferred from the handheld device at the helper device;

wherein the ~~selected~~ resource is not adequately provided by ~~said~~ the independent operation of ~~said~~ the handheld device.~~; and~~

~~whereby said one or more capabilities of said handheld device are extended through the operation of the selected resource of said helper device.~~

2. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 1, wherein~~: when said~~ if the helper device denies ~~said handheld device~~ access to ~~said~~ the resource, ~~repeating step (a) with a different~~ detecting another helper device that provides the resource.

3. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 1, ~~further comprising: (f) the operation of the selected resource on said data~~wherein using the resource to process the data transferred from the handheld device is controlled by ~~said~~ the handheld device.

4. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 1, further comprising:

~~(f) said helper device~~ sending an interface description from the helper device to ~~said~~ the handheld device;

~~(g) said handheld device~~ using the interface description to ~~constructing and displaying~~ construct and display a control interface ~~from said interface description~~ at the handheld device;

~~(h) said handheld device~~ transferring a ~~processed~~ user interaction with ~~said~~ the control interface from the handheld device to ~~said~~ the helper device, and

~~(i) said helper device~~ interpreting the user interaction based on ~~said selected~~ the resource;

wherein ~~said~~ the handheld device ~~operating said~~ operates the helper device based on ~~said~~ the user interaction, and

~~whereby new resources can be added or existing resources can be modified without requiring modifications on said~~ wherein adding a new resource or modifying an existing resource does not require modifying the handheld device.

5. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 1, further comprising: ~~(f) said helper device~~ sending a status report of the operation of the ~~selected~~ resource on ~~said~~ the data from the helper device to ~~said~~ the handheld device, ~~and~~

~~(g) said~~ wherein the handheld device ~~taking~~ performs an action based on ~~said~~ the status report.

6. (currently amended): A method for extending ~~one or more capabilities~~ a capability of a handheld device capable of independent operation, the method comprising:

~~(a) said handheld device~~ detecting a plurality of helper devices, ~~that~~ each ~~provide~~ helper device providing at least one resource and controlling access to the resource;

~~(b)~~ determining ~~whether any of said~~ the helper devices ~~is capable of providing a selected one of said at least one~~ that provide a first resource ~~to said~~ needed to extend the capability of the handheld device~~, said selected one of said at least one resource being selected to extend said one or more capabilities of said handheld device, said handheld device being capable of independent operation and said helper devices being configured to control access to the selected resource~~;

~~(c) said handheld device requesting~~ issuing a request for access to the ~~selected~~ first resource ~~from~~ to each of ~~said~~ the helper devices ~~that provide~~ providing the ~~selected~~ first resource, each of ~~said~~ the helper devices providing the first resource queuing the request if ~~said~~ the first resource is temporarily unavailable~~; (d)~~, wherein when the ~~selected~~ first resource becomes available to ~~one of said helper devices~~ a first helper device having queued the request, ~~said one of said helper devices~~ the first helper device ~~granting said~~ grants the handheld device access to ~~said~~ the first resource and ~~ignoring all queued~~ any requests for ~~said~~ the first resource queued in the other helper devices ~~having queued the request~~ are ignored;

~~(e)~~ transferring data to ~~said one of said helper devices~~ the first helper device from ~~said~~ the handheld device, ~~in accordance with said one of said helper devices granting said handheld device~~ if the first helper device grants access to the ~~selected~~ first resource;

~~(f) said one of said helper devices~~ using the ~~selected~~ first resource to process ~~said~~ the data transferred from the handheld device at the first helper device;

~~(g) said one of said helper devices from step (e)~~ sending an interface description from the first helper device to ~~said~~ the handheld device;

~~(h) said handheld device~~ constructing and displaying a control interface from ~~said~~ the interface description at the handheld device;

~~(i) said handheld device~~ processing a user interaction with ~~said~~ the control interface at the handheld device, and

~~(j) said handheld device~~ operating ~~said one of said helper devices~~ the first helper device based on ~~said~~ the user interaction,

~~wherein all requests for the selected resource, in other helper devices having queued the request from said handheld device, are ignored;~~

wherein the ~~selected~~ first resource is not adequately provided by ~~said~~ the independent operation of ~~said~~ the handheld device.~~, and~~

~~whereby said one or more capabilities of said handheld device are extended through the operation of the selected resource of said helper device.~~

7. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 6, wherein~~: when~~ if a communication between ~~said~~ the handheld device and ~~said one of said helper devices of step (e)~~ the first helper device is broken before ~~said~~ the

handheld device has completed use of the ~~selected~~ first resource, ~~returning to step (a)~~ detecting another helper device providing the first resource.

8. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 6, further comprising: ~~(g) the operation of the selected resource on said~~ controlling the processing of the data, transferred from the handheld device to the first helper device, ~~is controlled~~ by ~~said~~ the handheld device.

9. (canceled).

10. (currently amended): The method ~~for extending one or more capabilities of a handheld device~~ of claim 6, further comprising:

~~(g) said one of said helper devices from step (e)~~ sending a status report of the ~~operation~~ processing of the ~~selected resource on said~~ data using the first resource, from the first helper device to ~~said~~ the handheld device, and

~~(h) said handheld device taking~~ performing an action by the handheld device based on ~~said~~ the status report.

11. (currently amended): A system for extending ~~one or more capabilities~~ a capability of a mobile device, the system comprising:

~~(a)~~ a handheld device~~, said handheld being~~ capable of independent operation; and

~~(b)~~ a plurality of helper devices, each ~~of said helper devices~~ helper device providing ~~at least one~~ an extension service and controlling access to the at least one extension service;

wherein ~~said~~ the handheld device communicates with each of ~~said~~ the helper devices to determine ~~whether~~ if any of ~~said~~ the helper devices is capable of providing a selected ~~one of said at least one~~ extension service to ~~said~~ the handheld device~~, said helper devices being configured to control access to the selected extension service~~;

wherein ~~said~~ the handheld device ~~requests~~ issues a request for the selected extension service ~~from~~ to each of ~~said~~ the helper devices providing the selected extension service, and each of ~~said~~ the helper devices providing the selected extension service ~~queuing~~ queue the request if the selected extension service is temporarily unavailable;

wherein when the selected extension service becomes available to ~~one of said helper devices~~ a first helper device having queued the request, ~~said one of said helper devices~~ the first helper device grants ~~said~~ the handheld device access to the selected extension service, and all other queued requests for the selected extension service, in other helper devices ~~having queued the request from said handheld device~~, are ignored;

wherein if each of the helper devices providing the selected extension service denies the handheld device access to the selected extension service, the handheld device terminates communication with each of the helper devices providing the selected extension service;

wherein ~~said~~ the handheld device transfers data to ~~said one of said helper devices~~ the first helper device, ~~in accordance with said one of said helper devices granting said handheld device~~ if the first helper device grants access to the selected extension service;

wherein ~~said one of said helper devices~~ the first helper device uses the selected extension service to process ~~said~~ the data transferred from the handheld device to the first helper device ;

~~wherein when each of said helper devices denies said handheld device access to the selected extension service, said handheld device terminates said communication with each of said helper devices;~~

wherein ~~said one of said helper devices~~ the first helper device sends an interface description to ~~said~~ the handheld device;

wherein ~~said~~ the handheld device constructs and displays a control interface ~~from said~~ using the interface description;

wherein ~~said~~ the handheld device transfers a ~~processed~~ user interaction with ~~said~~ the control interface to ~~said one of said helper devices~~the first helper device,

~~said one of said helper devices~~ wherein the first helper device interprets the user interaction based on the selected extension service;

wherein ~~said~~ the handheld device operates ~~said one of said helper devices~~ the first helper device based on ~~said~~ the user interaction, and

wherein the selected extension service is not adequately provided by ~~said~~ the independent operation of ~~said first~~ the handheld device, and

~~whereby said one or more capabilities of said handheld device is extended through the operation of the selected extension service of said helper device and~~ wherein a new extension ~~services~~ service can be added or an existing extension ~~services~~ service can be modified without ~~requiring modifications on said~~ modifying the handheld device.

12. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, wherein~~:~~ the operation of the selected extension service on ~~said~~ the data is controlled by ~~said~~ the handheld device.

13. (canceled).

14. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, wherein~~: said~~ the interface description is specified in a markup language.

15. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, further comprising: ~~(c)~~ a storage device ~~for storing~~ which stores service information for ~~said at least one~~ the extension service provided by each of ~~said~~ the helper devices.

16. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, further comprising: ~~(c)~~ an access database ~~for storing~~ which stores authentication data associated with ~~said~~ the handheld device, ~~and~~

wherein ~~said~~ each of the helper devices providing the selected extension service control access to the selected extension service using ~~said~~ the authentication data.

17. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, wherein: ~~said~~ the data transferred from ~~said~~ the handheld device consists of a URL.

18. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, wherein: ~~said~~ the data transferred from ~~said~~ the handheld device ~~includes one or more URLs~~ comprises a URL.

19. (currently amended): The system ~~for remotely accessing a resource~~ of claim 11, wherein~~: said~~ the handheld device includes a client for communicating with each of ~~said~~ the helper devices, ~~said~~ the client being activated on demand.

20. (currently amended): The system ~~for remotely accessing a resource~~ of claim 11, wherein~~: said~~ the handheld device includes a client for communicating with each of ~~said~~ the helper devices, ~~said~~ the client running as a daemon.

21. (currently amended): The system ~~for extending one or more capabilities of a mobile device~~ of claim 11, wherein~~: said one of said helper devices~~ the first helper device sends a status report of the operation of the selected extension service on ~~said~~ the data to ~~said~~ the handheld device, and ~~said~~ the handheld device ~~takes~~ performs an action based on ~~said~~ the status report.

22. (currently amended): A system for extending ~~one or more capabilities~~ a capability of a handheld device capable of independent operation, the system comprising:

~~(a) a~~ first means in the handheld device for accessing ~~at least one~~ a resource of a local device;

~~(b) a~~ second means in the local device for controlling access to ~~said at least one~~ the resource; and

~~(c) a~~ third means in at least one of the handheld device and the local device for communicating between ~~said~~ the first means and ~~said~~ the second means;

wherein ~~said~~ the first means uses ~~said~~ the third means to determine ~~whether said~~ if the second means is capable of providing ~~a selected one of said at least one~~ the resource to ~~said~~ the first means;

wherein ~~said~~ the first means uses ~~said~~ the third means to issue a request ~~said selected~~ for the resource from ~~said~~ the second means, ~~said~~ the second means queuing the request if ~~said selected~~ the resource is temporarily unavailable;

wherein ~~when said selected~~ if the resource becomes available to ~~said~~ the second means, ~~said~~ the second means grants ~~said~~ the first means access to ~~said selected~~ the resource, and any other queued requests for ~~said selected~~ the resource ~~from said~~ issued by the first means to other local devices are ignored;

wherein ~~said~~ the first means uses ~~said~~ the third means to transfer data to ~~said~~ the second means, ~~in accordance with said~~ if the second means ~~granting said~~ grants the first means access to ~~said selected~~ the resource;

wherein ~~said~~ the second means uses ~~said selected~~ the resource to process ~~said~~ the data;

wherein ~~said~~ the second means uses ~~said~~ the third means to send an interface description to ~~said~~ the first means;

wherein ~~said~~ the first means constructs and displays a control interface ~~from said~~ using the interface description;

wherein ~~said~~ the first means uses ~~said~~ the third means to transfer a user interaction with ~~said~~ the control interface to ~~said~~ the second means;

wherein ~~said~~ the second means interprets the user interaction based on ~~said selected~~ the resource;

wherein ~~said~~ the first means uses ~~said~~ the third means to operate ~~said~~ the second means based on ~~said~~ the user interaction; and

~~wherein said first means is mobile and capable of independent operation;~~

wherein ~~said selected~~ the resource is not adequately provided by ~~said~~ the independent operation of ~~said~~ the first means.~~, and~~

~~whereby said one or more capabilities of said first means is extended through the operation of the selected resource of said second means and new resources can be added or existing resources can be modified without requiring modifications on said handheld device.~~

23. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein: the operation of ~~said~~ the resource on ~~said~~ the data is controlled by ~~said~~ the first means using ~~said~~ the third means.

24. (canceled).

25. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein: ~~said~~ the interface description is specified in a markup language.

26. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein: the request for ~~said~~ the resource includes capability information associated with ~~said~~ the first means, and

wherein ~~said~~ the capability information is used by ~~said~~ the second means to determine the appropriate interface description to send to ~~said~~ the first means.

27. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein: the request for ~~said~~ the resource from ~~said~~ the first means includes the type of the data to be transferred and the size of ~~said~~ the data.

28. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein~~: said~~ the data transferred from ~~said~~ the first means consists of a URL.

29. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein~~: said~~ the data transferred from ~~said~~ the first means ~~includes one or more URLs~~ comprises a URL.

30. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein~~: said~~ the first means includes a client for accessing ~~said at least one~~ the resource, ~~said~~ the client being activated on demand.

31. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein~~: said~~ the first means includes a client for accessing ~~said at least one~~ the resource, ~~said~~ the client running as a daemon.

32. (currently amended): The system ~~for extending one or more capabilities of a handheld device~~ of claim 22, wherein~~: said~~ the second means uses ~~said~~ the third means to send a

status report of the operation of ~~said~~ the resource on ~~said~~ the data to ~~said~~ the first means, and ~~said~~ the first means ~~takes~~ performs an action based on ~~said~~ the status report.